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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,931	09/13/2000	ATTAULLAH SHEIKH	36J.P248	7452

5514 7590 04/20/2006

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EXAMINER

DUONG, THOMAS

ART UNIT PAPER NUMBER

2145

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/660,931

Applicant(s)

SHEIKH, ATTAULLAH

Examiner

Thomas Duong

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 19-25, and 29-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 19-25, and 29-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.
2. Amendment received January 23, 2006 has been entered into record. *Claims 1-12, 19-25, and 29-35* remain pending.

Response to Amendment

3. This office action is in response to the applicants Amendment filed on February 8, 2006. Applicant amended *claims 1, 9, 12, 19, 29, 32, and 34*. *Claims 1-12, 19-25, and 29-35* are presented for further consideration and examination.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. *Claims 19-25, 29-31, and 34-35* are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter,

Art Unit: 2145

which is not described in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not show how the computer program stored in a computer readable medium can perform the modules claimed. Please clarify the language of the claim.

6. Claims 19-25, 29-31, and 34-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not disclose the computer readable medium as claimed. Please clarify the language of the claim.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 19-25, 29-31, and 34-35 are rejected under 35 U.S.C. 101 because the claims are not limited to tangible embodiments since they are stored on an unspecified computer readable medium as claimed. As such, the claim is not limited to statutory subject matter and is therefore non-statutory. To overcome this type of 101 rejection the claims need to be amended to include only the physical computer media and not a transmission media or other intangible or non-functional media. For the specification at

Art Unit: 2145

the bottom, carrier medium and transmission media would be not statutory but storage media would be statutory.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 7-9, 12, 19, 24-25, 29, 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawley et al. (US006321270B1) and in view of Holloway et al. (US006175866B1).

11. With regard to claims 1, 9, 12, 19, 29, 32 and 34, Crawley discloses,

- *establishing plural multicast groups*, (Crawley, col.2, lines 46-49; col.4, line 63 – col.5, line 3; col.5, lines 18-35, lines 61-66; col.9, lines 29-33; modules 66-70, fig.3)

Crawley teaches of configuring multicast groups by adding, deleting or modifying network nodes as members that subscribes to receive changes or updates in the network topology. According to Crawley, “*some network nodes participating in a particular multicast session may be preconfigured by the network administrator*” (Crawley, col.4, lines 65-67) implying that the network administrator may preconfigure a multicast session for a set of network nodes or group that, in responding to “*various types of changes, including adding new multicast members, deleting existing multicast members*”, etc. (Crawley, col.5, lines 23-

25), *"the multicast control information and network nodes participating in the multicast sessions are updated"* (Crawley, col.5, lines 27-29). Hence, Crawley teaches of configuring multicast groups and updating information to the subscribed multicast groups.

- *submitting change information responsive to a change being made to the directory in the directory server, the change information being submitted to each member which belongs to a selected one of the plural multicast groups corresponding to the change category for the type of change made to the directory in the directory server.* (Crawley, col.2, lines 46-49; col.4, line 63 – col.5, line 3; col.5, lines 18-35, lines 61-66; col.9, lines 29-33; modules 66-70, fig.3)

Crawley teaches of configuring multicast groups by adding, deleting or modifying network nodes as members that subscribes to receive changes or updates in the network topology. Crawley teaches of transmitting the updates information, which reflects a change in network topology (i.e. node added, node deleted, etc.) via multicasting to relevant nodes that are members of particular multicast groups, which may subscribe to receive updates on added nodes, deleted nodes, etc. Furthermore, it is well known in the art to configure multicast groups containing members that are interested in receiving certain updates or information in response to a network topology change such as updates on added nodes, deleted nodes, etc. Crawley also states *"network nodes not participating in the multicast session (i.e. subscribing to a particular change or event) do not receive any control information"* (Crawley, col.5, lines 58-59) and that *"control point 22 monitors the network for any changes to the multicast session or*

Art Unit: 2145

changes in the network topology. If control point 22 identifies any changes, the multicast session and network nodes participating in the session are updated as needed" (Crawley, col.5, lines 64-67).

However, Crawley does not explicitly disclose,

- *each multicast group corresponding to a respective change category for a type of change made to the directory in the directory server;*

Holloway teaches,

- *each multicast group corresponding to a respective change category for a type of change made to the directory in the directory server;* (Holloway, col.2, lines 20-43; col.15, lines 12-50)

Holloway teaches of a method and system where *"one or more network parameters of one or more network devices are grouped. In response to grouping, a group monitor is constructed wherein any changes of the grouped one or more network parameters are reflected by the constructed group monitor. The constructed group monitor can thereafter be monitored for indications of changes in any of the grouped network parameters"* (Holloway, col.2, lines 33-40). Hence, Holloway teaches of defining a group of network devices based on a network parameter, wherein a change in the network parameter of one member in the group causes a notification be sent to the remaining group members.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Holloway with the teachings of Crawley to provide a technique for defining groups of users who access network services, or are provided network services, in such a way as to determine membership only when the service is requested or about to be provided, and to

determine this membership based on a flexible specification of user or object attributes. According to Holloway, *"it is apparent that a need exists for a method and system which will facilitate network or device management and monitoring in a decentralized way that reduces computational and bandwidth inefficiencies and allows a user to define what status information will be kept and reported"* (Holloway, col.2, lines 12-17).

12. With regard to claims 7-8 and 24-25, Crawley and Holloway disclose,

- *wherein a client registers with at least one of the plural multicast groups in order to obtain the change information corresponding to each multicast group for which the client has registered* (Crawley, col.2, lines 46-49; col.4, line 63 – col.5, line 3; col.5, lines 18-35, lines 61-66; col.9, lines 29-33; modules 66-70, fig.3)

Crawley teaches of configuring multicast groups by adding, deleting or modifying network nodes as members that subscribes to receive changes or updates in the network topology. It is well known in the art of multicasting that the client must register or subscribe to a group in order to receive update or information regarding the group.

13. Claims 2-6, 10-11, 20-23, 30-31, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawley (US006321270B1), in view of Holloway et al. (US006175866B1), and further in view of Fitler, Jr. et al. (US006366913B1).

14. With regard to claims 2-6, 10-11, 20-23, 30-31, 33 and 35, Crawley and Holloway disclose,

See *claims 1, 9, 19, 29, 32 and 34* rejection as detailed above.

However, Crawley and Holloway do not explicitly disclose,

- *wherein the change information is submitted to the multicast groups utilizing a connectionless protocol.*
- *wherein each of the plurality of change categories correspond to an add, delete, modify or search changes.*
- *wherein changes made in the directory server are performed utilizing a Lightweight Directory Server Protocol.*
- *wherein change information is submitted for multicast by a plug-in that extends capabilities of the directory server.*
- *wherein the plug-in generates information packets based on changes made in the directory server, and submits the information packets to the multicast groups.*

Fitler teaches,

- *wherein the change information is submitted to the multicast groups utilizing a connectionless protocol* (Fitler, col.4, lines 16-18; col.5, lines 11-13, lines 31-36; col.6, lines 8-15)

Fitler teaches of configuring dynamic groups using tree structured directory service implemented in connectionless protocols such as LDAP and X.500.

- *wherein each of the plurality of change categories correspond to an add, delete, modify or search changes.* (Fitler, col.1, lines 23-63, lines 65-67; col.3, lines 34-35; col.4, lines 16-18; col.5, lines 11-13, lines 31-36; col.6, lines 8-15; col.7, lines 9-12)

Art Unit: 2145

- *wherein changes made: in the directory server are performed utilizing a Lightweight Directory Server Protocol* (Fidler, col.4, lines 16-18; col.5, lines 11-13, lines 31-36; col.6, lines 8-15)

Fidler teaches of configuring dynamic groups using tree structured directory service implemented in connectionless protocols such as LDAP and X.500.
- *wherein change information is submitted for multicast by a plug-in that extends capabilities of the directory server* (Fidler, col.1, lines 23-63, lines 65-67; col.3, lines 34-35; col.4, lines 16-18; col.5, lines 11-13, lines 31-36; col.6, lines 8-15; col.7, lines 9-12)
- *wherein the plug-in generates information packets based on changes made in the directory server, and submits the information packets to the multicast groups.* (Fidler, col.1, lines 23-63, lines 65-67; col.3, lines 34-35; col.4, lines 16-18; col.5, lines 11-13, lines 31-36; col.6, lines 8-15; col.7, lines 9-12)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Fidler with the teachings of Crawley and Holloway to provide a technique for defining groups of users who access network services, or are provided network services, in such a way as to determine membership only when the service is requested or about to be provided, and to determine this membership based on a flexible specification of user or object attributes.

Response to Arguments

15. Applicant's arguments with respect to *claims 1, 9, 12, 19, 29, 32, and 34* have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2145

Conclusion


16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 571/272-3911. The examiner can normally be reached on M-F 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason D. Cardone can be reached on 571/272-3933. The fax phone numbers for the organization where this application or proceeding is assigned are 571/273-8300 for regular communications and 571/273-8300 for After Final communications.

Thomas Duong (AU2145)

April 14, 2006

Jason D. Cardone

Supervisory PE (AU2145)

 FOR
ZARNI MAUNG
SUPERVISORY PATENT EXAMINER